

WHAT IS CLAIMED IS:

Sub E1
5 1. A microorganism which can metabolize a carbon source at a specific pH in a liquid medium containing L-glutamic acid at a saturation concentration and the carbon source, and has ability to accumulate L-glutamic acid in an amount exceeding the amount corresponding to the saturation concentration in the liquid medium at the pH.

2. The microorganism according to claim 1, which can grow in the liquid medium.

10 3. The microorganism according to claim 1 or 2, wherein the pH is not more than 5.0.

4. The microorganism according to any one of claims 1-3, which has at least one of the following characteristics:
15 (a) the microorganism is enhanced in activity of an enzyme that catalyzes a reaction for biosynthesis of L-glutamic acid; and

(b) the microorganism is decreased in or deficient in activity of an enzyme that catalyzes a reaction branching from a biosynthetic pathway of L-glutamic acid and producing
20 a compound other than L-glutamic acid by.

5. The microorganism according to claim 4, wherein the enzyme that catalyzes the reaction for biosynthesis of L-glutamic acid is at least one selected from citrate synthase, phosphoenolpyruvate carboxylase and glutamate
25 dehydrogenase.

6. The microorganism according to claim 4 or 5, wherein the enzyme that catalyzes the reaction branching from the biosynthetic pathway of L-glutamic acid and producing

the compound other than L-glutamic acid is α -ketoglutarate dehydrogenase.

7. The microorganism according to any one of claims 1-6, wherein the microorganism belongs to the genus
5 *Enterobacter*.

8. The microorganism according to claim 7, which is *Enterobacter agglomerans*.

9. The microorganism according to claim 8, which has a mutation that causes less extracellular secretion of
10 a viscous material compared with a wild strain when cultured in a medium containing a saccharide.

10. A method for producing L-glutamic acid by fermentation, which comprises culturing a microorganism as defined in any one of claim 1-9 in a liquid medium of which
15 pH is adjusted to a pH at which L-glutamic acid is precipitated, to produce and accumulate L-glutamic acid and precipitate L-glutamic acid in the medium.

11. A method for screening a microorganism suitable for producing L-glutamic acid by fermentation with
20 precipitating L-glutamic acid in a liquid medium, which comprises inoculating a sample containing microorganisms into an acidic medium containing L-glutamic acid at a saturation concentration and a carbon source, and selecting a strain that can metabolize the carbon source.

12. The method according to claim 11, wherein a
25 strain that can grow in the medium is selected as the strain that can metabolize the carbon source.

13. The method according to claim 11 or 12, wherein

a pH of the medium is ~~not~~ more than 5.0.

~~46~~
57

add E_2